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which being connected together by smaller chains, assume in some measure the appearance of a net. On this bridge of chains a number of very thick planks have been placed, some means of connecting which, have been adopted in order to obtain a continuous platform; but as a vacant space still remains between this platform and the gateways and pillars, on account of the curve assumed by the chains, especially when loaded, this defect has been remedied by the aid of planking supported on trusses or consoles. On each side of this planking small pilasters of wood have been erected, which support a roof of the same material, the two extremities of which rest on the pillars that stand on the banks of the river." The writer proceeds to remark, that "the Chinese have made several other bridges in imitation of this. One, on the river Kin-cha-Hyang, in the ancient canton of Lo-Lo, which belongs to the province of Yun-Nan, is particularly known. In the province of Se-Chuen there are one or two others, which are sustained only by ropes; but though of an inconsiderable size, they are so unsteady and so little to be trusted that they cannot be crossed without sensations of fear."

While our attention is directed to early accounts and to the origin of suspension bridges, it may be proper to remark, that although, as we have seen, the inhabitants of the mountainous districts of South America, or the wild and barbarous regions of Thibet, appear to have been well acquainted with the purposes for which these structures are best adapted, and to have practised their construction from the most remote ages, neither the Greeks, the Romans, nor the Egyptians, according to all we know of those nations, had any knowledge of their uses or properties, or ever employed them as a means for crossing a river, or other natural impediment. It is not, therefore, from these celebrated nations of antiquity that the engineer has derived his first hints for the construction of suspension bridges, but from those rude and unpolished people, the results of whose ingenuity have just been described.

But it will now be interesting to inquire how far we can trace back the antiquity of suspension bridges in more civilized countries—on the Continent, in the British Isles, and in the United States of America. Scamozzi speaks of suspension bridges existing in Europe in the beginning of the seventeenth century, but it is very questionable if he employed that term to designate the same structure to which it is now applied; and this is rendered the more improbable, as no such bridges are now in existence, and other writers are totally silent upon the subject. It does not appear, then, that suspension bridges of other than recent erection have existed on the Continent, and in England the oldest of which we have any account has not been constructed more than a century. The first suspension bridge in the United States was erected in the year 1796. In England the oldest bridge of the kind is believed to have been the Winch Chain Bridge, suspended over the Tees, and thus forming a communication between the counties of Durham and York. Mr Stevenson (Edinburgh Philosophical Journal) expresses his regret at not having been able to learn the precise date of the erection of this bridge; from good authority, however, he concludes it to be about the year 1741. It may also be mentioned here, that at Carrio-a-rede, near Ballintoy, in Ireland, there is a rope bridge, which in 1800 was reported to have been in use longer than the present generation could remember.

In the years 1816 and 1817, some wire suspension bridges were executed in Scotland, and, though not of great extent, are the first example of this species of bridge architecture in Great Britain. As, however, full descriptions of these bridges are to be met with elsewhere, it will not be necessary to notice them further.

In 1818, Mr Telford was consulted by government as to the practicability of erecting a suspension bridge over the Menai Strait, and was commissioned to prepare a design, if upon an examination of the localities he found the project feasible. Having accordingly surveyed the spot, he was led to propose the construction of a suspension bridge near Bangor Ferry, and in 1819 an act was obtained, authorising the erection of the bridge, a sum of money having been previously voted by Parliament for that purpose. This structure, which will always be regarded as a monument of the engineering abilities of Telford, was commenced in August 1819, and opened to the public on the 30th January 1826, having occupied six and a half years in its erection. The Union Bridge across the Tweed was designed and executed by Captain Brown, and was the first bar chain bridge of considerable size

that was completed in this country. It was commenced in August 1819, and finished in the month of July 1820. After the completion of the Menai Bridge, bridges on the suspension principle began to be universally adopted throughout Europe; but it was not till iron wires had been proved to be more firm than bars of a greater thickness that these bridges received their most extensive applications. Since 1821, Messrs Sequin have constructed more than fifty wire bridges in France with the most complete success. The wire suspension bridge at Freyburg, in Switzerland, the largest in the world, was erected by Mons. Challey, and depends across the valley of the Sarine. It was commenced in 1831, and thrown open to the public in 1834. A suspension bridge has also been erected at Montrose, the size of which is scarcely inferior to that of the Menai Bridge. At Clifton a very large suspension bridge is now in progress of erection by Mr Brunel, and a suspension bridge of 1600 feet in length is about to be erected over the Danube, between Pest and Offen, the design for which is the production of Mr W. Tierney Clark, and under whose able superintendence its construction will be effected.—*Civil Engineer and Architect's Journal.*

REMONSTRANCE WITH THE SNAILS.

Ye little Snails,
With slippery tails,
Who noiselessly travel
Along this gravel,
By a silvery path of slime unsightly,
I learn that you visit my pea-rows nightly.
Felonious your visit, I guess!
And I give you this warning,
That, every morning,
I'll strictly examine the pods;
And if one I hit on,
With slaver or spit on,
Your next meal will be with the gods.

I own you're a very ancient race,
And Greece and Babylon were amid;
You have tenanted many a royal dome,
And dwelt in the oldest pyramid;
The source of the Nile!—Oh! you have been there.
In the ark was your floodless bed;
On the moonless night of Marathon
You crawl'd o'er the mighty dead;
But still, though I reverence your ancestries,
I don't see why you should nibble my peas.

The meadows are yours—the hedge-row and brook,
You may bathe in their dews at morn;
By the aged sea you may sound your shells,
On the mountain erect your horn;
The fruits and the flowers are your rightful dowers,
Then why—in the name of wonder—
Should my six pea-rows be the only cause
To excite your midnight plunder?

I have never disturbed your slender shells,
You have hung round my aged walk;
And each might have sat, till he died in his fat,
Beneath his own cabbage-stalk:
But now you must fly from the soil of your sires,
Then put on your liveliest crawl;
And think of your poor little snails at home,
Now orphans or emigrants all.
Utensils domestic, and civil, and social,
I give you an evening to pack up:
But if the moon of this night does not rise on your flight,
To-morrow I'll hang each man Jack up.
You'll think of my peas and your thievish tricks,
With tears of slime when crossing the Styx.

POSTSCRIPT.

If darkness should not let thee read this,
Furtive Snail,
Go ask thy friend, the Glow-worm,
For his tail.

—From a Newspaper.

That man should be happy, is so evidently the intention of his Creator, the contrivances to that end are so multitudinous and so striking, that the perception of the aim may be called universal. Whatever tends to make men happy, becomes a fulfilment of the will of God. Whatever tends to make them miserable, becomes opposition to his will.—*Harriet Martineau.*